

IN THE CLAIMS

1 (Currently Amended). A method comprising:
identifying a firmware upgrade request by a firmware program;
retrieving a file signed with a private key;
validating the file with a public key;
upgrading a portion of the firmware program ~~by the firmware program~~;
locking a device storing the firmware program such that a second portion of the
firmware program is not readable;
validating the public key; and
retrieving a second public key from the firmware program if the public key is not
valid.

Claim 2 (Canceled).

3 (Original). The method of claim 1, identifying a firmware upgrade request by a
firmware program further comprising:
reading a flag, wherein the flag is located in a non-volatile medium; and
determining that the flag is set.

4 (Original). The method of claim 3, further comprising:
deleting the file; and
clearing the flag.

5 (Original). The method of claim 1, further comprising:
determining that the file is not authentic; and
locking the device.

6 (Original). The method of claim 1, further comprising:
locking the device after upgrading a portion of the firmware program by the
firmware program.

7 (Original). The method of claim 1, wherein the second portion of the firmware program is a public key.

Claims 8-26 (Canceled).

27 (Currently Amended). An article comprising a medium storing instructions for enabling a processor-based system to:

- identify a firmware upgrade request by a firmware program;
- retrieve a file signed with a private key;
- validate the file with a public key;
- upgrade a portion of the firmware program ~~by the firmware program~~;
- lock a device storing the firmware program such that the public key is not readable;
- validate the public key; and
- retrieve a second public key from the firmware program if the public key is not

valid.

Claim 28 (Canceled).

29 (Previously Presented). The article of claim 27, further storing instructions that enable the processor-based system to:

- determine that the file is not authentic; and
- lock the device.

Claims 30 and 31 (Canceled).

32 (Currently Amended). A method comprising:

- identifying a firmware upgrade request by a firmware program;
- retrieving a file signed with a private key;
- validating the file with a public key;
- upgrading a portion of the firmware program ~~by the firmware program~~;

locking a device storing the firmware program such that a second portion of the firmware program is not readable;

validating the public key;

retrieving a second public key from the firmware program if the public key is not valid;

reading a flag, wherein the flag is located in a non-volatile medium;

determining that the flag is set;

deleting the file; and

clearing the flag.

33 (Currently Amended). A method comprising:

storing providing a first portion of a firmware code which is not upgradable in a first reprogrammable semiconductor memory;

providing a second portion of a firmware code that is upgradable in said first reprogrammable semiconductor memory; and

providing information for authenticating an upgrade of the second portion in the first portion.

34 (Previously Presented). The method of claim 33 including locking the first portion to prevent reading said first portion.

35 (Previously Presented). The method of claim 34 including providing a signature authentication in said first portion.

36 (Previously Presented). The method of claim 34 including providing two public keys.

37 (Previously Presented). The method of claim 36 including providing two identical public keys.

38 (Previously Presented). The method of claim 34 including providing instructions in said first portion to confirm the validity of a firmware upgrade file.

39 (Currently Amended). The method of claim 34 including determining whether an upgrade request is authentic and if said upgrade request is not authentic, locking the second ~~first~~ portion against being written.

40 (Currently Amended). A processor-based system comprising:
a processor; and
a reprogrammable semiconductor memory storage storing a basic input/output system, ~~said basic input/output system~~ including a first portion that is not upgradable and a second portion that is upgradable, said first portion including an upgrade verification code.

41 (Currently Amended). The system of claim 40 including a public key in said second ~~first~~ portion.

42 (Currently Amended). The system of claim 40 including two public keys in said second ~~first~~ portion.